Network Working Group
Request for Comments: #247
NIC 7688
Categories: Policy, Telnet
Related: #226, 236, 239, 233, 237
Obsoletes: #226

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7688

Proffered Set of Standard Host Names

In RFC #226, BBN's TENEX list of Host names was set up as a strawman set of standard Host names. Comments received since then (an RFC actually generated comments!!!) have influenced me to propose the following general rules for forming Host names.

The Host names will be 8 characters in length. The general form is

<site> '-' <machine>

<site> will be at most 4 characters, formed as follows:

(a) Use the keyword in the site name, if not more than four characters, e.g., NASA Ames, Case Western Reserve.

(b) Use the standard acronym, if not more than four characters, e.g., UCLA, RADC, NBS.

(c) If a standard abbreviation exists, use it, e.g., Ill.

(d) If none of the above apply, use the first four letters in the site name, e.g., Burr, Mitr, Harv.

(e) If none of the above is acceptable to the site, the technical liaison should select the site mnemonic.

<machine> will be at most 4 characters of the form <mfg. #> <designator>.
Examples of mfg. # are:

IBM 360	2 digit model number
IBM 370	3 digit model number
PDP	1 - 2 digit model number
Burroughs	4 digits
CDC	4 digits
etc.	

<designator> will be used when more than one machine of the same type is located at a site (e.g., 2 PDP-10s at MIT, at SRI, and at BBN).

Limiting <machine> to 4 characters does not permit distinctions to be made between machines with 4 digit mfg. #s. I expect the situation will be handled in an ad hoc manner by the NIC if it arises.

TIPs are identified as 'TIP' rather than by '316'. If a Host is not to be permanently addressable, the machine is identified as 'TEST'.

A list of Host names, formed according to these rules, is attached. Alternate Host names should be provided, as suggested by Jon Postel (RFC #236). RFC's 206, 233, and 236 present lists with 4-character alternate names. The Technical Liaison should select the alternate name for his site and communicate the selection to the NIC.

The preceding rules and the attached list of Host names are subject to the approval of the NWG. Hereafter, the list will be generated and maintained by the NIC in cooperation with the Technical Liaison at each site, as suggested in RFC #237. Comments should be addressed to Dick Watson.

RFC #247
Attachment 1

NETWORK ADDRESS	STANDARD NAME
1	UCLA-7
65	UCLA-91
2	SRI-10NI
66	SRI-10AI
3	UCSB-75
4	UTAH-10
5	BBN-516
69	BBN-10A
133	BBN-10B
6	MIT-645
70	MIT-10DM
134	MIT-10AI
7	RAND-65
71	RAND-10
8	SDC-75
9	HARV-10
73	HARV-1
137	HARV-11
10	LL-67
74	LL-TX2
138	LL-TSP
11	SAIL-10
12	ILL-11
76	ILL-6500
13	CASE-10
14	CMU-10
15	BURR-6500
79	BURR-TEST
16	AMES-67
144	AMES-TIP
145	MITR-TIP
18	RADC-645
146	RADC-TIP
19	NBS-11
147	NBS-TIP
148	ETAC-TIP
21	TINK-418
22	MCCL-418
23	USC-44
151	USC-TIP
152	GWC-TIP
25	NCAR-7600
153	NCAR-TIP
158	BBNX-TEST

An Implementation Scheme

If the standard Host names are formed according to the proposed rules, the following implementation scheme, suggested by Steve Crocker, can be used.

> Map <site> into an 8-bit number, S and map <machine> into an 8-bit number, M, where
>
> $S \oplus M$ = Network Address.
>
> S and M can be selected such that specification of <site> alone could cause a default to the "primary" Host at the site. Note that this scheme depends on a unique <site> designator for each IMP.

Some examples:

If the "primary" Host at UCLA is the 91, let

UCLA → S = X'41'
7 → M = X'40'
91 → M = X'00'

then for

UCLA-7, $S \oplus M$ = X'01' = 1_{10}
UCLA-91, $S \oplus M$ = X'41' = 65_{10}

and

UCLA alone = X'41' = 65_{10}

If the primary Host at BBN is TENEX System A, let

BBN → S = X'45'
516 → M = X'40'
10A → M = X'00'
10B → M = X'C0'

then for

BBN-516, $S \oplus M$ = X'05' = 5_{10}
BBN-10A, $S \oplus M$ = X'45' = 69_{10}
BBN-10B, $S \oplus M$ = X'85' = 133_{10}

and

BBN alone = X'45' = 69_{10}

The primary Host for each IMP would be designated by the site and such information disseminated by the NIC.